

Flyer Package (Will there be one SKU or two? It's a different cable/connector for old VT card and VT4000 card... or will each pkg contain both cables?)

Box
Sleeve
Flyer Card
Cable to connect to VT card
Reg Card
Manual
Video (?)
Inserts (?)
Breakout Cable

Flyer Manual

Table of Contents
License Agreement (Bruce Clark, see below)
Warranty (Bruce Clark already on it, per Randy)
Installation

Requirements

Amiga 2000

200MB Hard Drive (Is this big enough? What's minimum?)

9 MB RAM

Accelerator needed? 68020 okay, or is 68030 minimum?

Amiga 3000 or 3000T

200 MB hard drive (Is this big enough? What's minimum?)

9 MB RAM or higher

Amiga 4000 or 4000T

200 MB hard drive (Is this big enough? What's minimum?)

10 MB RAM or higher

CD-ROM drive (double-speed SCSI 2 or faster)

(2) SCSI-2 hard disks, minimum 1GB capacity, from the list below

include list of currently compatible hard drives

Tools

Phillips screwdriver

Installing the Flyer Hardware

For all Amiga models...

Power off

Remove the cover

Insert the Flyer into an empty Amiga slot (Zorro type)

Connect the Flyer to the Toaster Card

Video Toaster 2000 model

Connect to header plug on card

Video Toaster 4000 model

Install new BNC connector

Install the CD-ROM drive (does this connect to one of the Flyer's SCSI II connection..?)

Mounted internally (A2000/A4000)

Connect to Flyer

Connect power

Mounted externally (A2000/A3000/A4000)*Connect to Flyer**Connect power***Installing and Formatting Flyer Drives**For all Amiga models...**Internally**Mount inside AmigaConnect powerConnect SCSI cable**Externally**Place beside AmigaConnect powerConnect SCSI cable**Formatting Drives connected to the Flyer**Must be formatted before you can use them!Formatting for Amiga use*Whose software for this? Since Flyer is the controller, it must be ours. Need to know the steps, buttons, etc.*Formatting for Flyer use*Whose software for this? Since Flyer is the controller, it must be ours. Need to know the steps, buttons, etc.***Close up the Amiga and replace the cover.**SCSI cabling issues**Number of drives on a chain****Can you mix SCSI I and SCSI II drives on a chain?****Can you mix Amiga-format and Flyer-format drives on a chain?****Termination****Installing the Flyer Software**For all Amiga models...**Power on the Amiga****Insert CD-ROM disk****Install procedure (?)**Copy files to Amiga hard diskCopy files to Flyer hard disk(s)**Overview: Operating the Flyer****Part I. The Recording Process**Recording to the Drives**Purpose of Panel: to record video footage onto the Flyer, so that you may begin the editing process**Select Record Clip to enter Recording Panel*May be selected from any Flyer editor screen*Select Tracks to Record*Audio (gain set automatically to line level)**Video*Select Video Quality Level*No grain D2 lossless (?)**Some Grain D2 lossy (?)**Grainy (?)*

Select Flyer Drive

This is a drive which holds video (not an Amiga drive)

Reorganize Drive (optional)

This option may allow for larger clips to be recorded. It rearranges files on the Flyer so that they consume one chunk of space, not many separate chunks, which would interfere with recording long clips.

Record

Click this button to begin recording to the Flyer drive

Pause

Click this button to pause recording, yet remain ready to continue (useful when you want to quickly dump several sections of a tape onto the drive without having to make each into a clip right away)

Stop

Click this when you are finished recording raw footage

Continue (go to Mark Clips)

Click this to get to the "clip defining" panel

Defining Clips

Purpose of Panel: to make smaller segments (clips) out of the larger video file just recorded to the drive

Mark In Point

Mouse: drag slider

Keyboard: press hotkey

Mark Out Point

Mouse: drag slider

Keyboard: press hotkey

Name Clip (required)

Provide a file name for this clip

Describe Clip (optional)

Enter a description of what occurs during this clip.

Choose Icon

Will this function be supported? If so, how?

Mark Clip "Used"

Mark this footage used, unavailable for inclusion in other clips

Exit and Make Clips, Delete Unused Footage

Exit the panel, make the clips designated by the user, delete the footage that was not marked in any clip

Return to Record Panel

Primarily useful if the user has entered this panel prematurely and desires to return to the previous panel.

Part II. The Editing ProcessElements that go into a Flyer Project

Video Clips

Externally Recorded Footage (on location, in studio, etc.). This of course must be recorded onto the Flyer before editing can begin.

Internal Recorded Footage (LightWave animations). This can be generated any time prior to completing the project.

Audio Clips

Recorded Samples (recorded from external sources such as music libraries or created by audio software ... question: how will audio software write music data to Flyer in a format that Flyer can read? Do we need to release this info? Is it possible?)

Stills

Flyer Stills (stored on Flyer drive). For Flyer owners, it makes the most sense to keep all still frames (including old Framestores) on the Flyer drive, since the Toaster accesses Framestores more slowly than the Flyer, where they are known as Flyer Stills or Flyer Frames.

RGB Images

ToasterCG Pages

Key Page

Scroll Page

Crawl Page

Toaster Framestores (stored on Amiga drive).

Framestore storage only truly makes sense for Toaster 4.0 users who do not purchase the Flyer.

Effects

Switcher Effects

ChromaFX

Digital

Analog

Animated

Non-transitional

Control Croutons

Wait for input

Wait for time

Play from here

others...

Procedure for Editing with the Flyer

Drag and Drop in open areas to add items

Drag in between to insert items

Drag on top to replace an item

Place Video clips in Sequence

Insert Stills

Insert Transitions/Effects

Insert Audio clips

Tweak Audio clips

Playback

Save Project

Part Three: Recording the Edited Master

Checklist

Is the project/program complete?

Hook up VCR on output

Start VCR recording

Play back from Flyer

Reference: Flyer Functions

The Flyer Editor (call these Modes, Editors, Displays, what?)

Project/Switcher

Useful for live production

Requires preparation: all production elements must be inserted into a project for use on-the-air

Upper Window displays current project (program)

Lower Window displays Switcher

Project/Files

Useful for early part of editing process, when dragging elements into main project

Upper Window displays current project (program)

Lower Window displays a file navigator (requester?)

Project/Project

Useful for pulling previously created segments of other programs into the current project (rather than recreating them from scratch every time)

Upper Window displays current project (program)

Lower Window displays the source project

Files/Files

Useful for file management (creating folders, organizing elements, deleting unwanted files, archiving (backing up), and more

Upper Window displays a file navigator (requester?)

Lower Window displays a file navigator (requester?)

Project Only

Useful for fine-tuning once all elements have been placed in the project window, allows for a bigger display of the project

Big Window displays current project (program)

Quit

Flyer Control Panels

Video Clip

Icon image

Name of crouton file

Number of this crouton in current project

Description of crouton (optional, if entered by user)

Play and Stop buttons

Current length of crouton (in to out)

Current length of program (up to this point, or total pgm?)

Slider for setting In and Out point

Fine Tune button to access:

Time code readout

Volume

Channel for playback

Fade in and fade out controls

Audio Clip

Icon image

Name of crouton file
Number of this crouton in current project
Description of crouton (optional, if entered by user)
Play and Stop buttons
Current length of crouton (in to out)
Current length of program (up to this point, or total pgm?)
Start Time control
Fine Tune button to access:
 Time code readout
 Volume
 Channel for playback
 Fade in and fade out controls

Still Image

Icon image
Name of crouton file
Number of this crouton in current project
Description of crouton (optional, if entered by user)
Play and Stop buttons
Current length of crouton (in to out)
Current length of program (up to this point, or total pgm?)
Duration control

Special Effect

Icon image
Name of effect
Number of this effect in current project
Play and Stop buttons
Speed button (speed of effect or transition, if applicable)
Duration (for looping effects)

Control Croutons

Miscellaneous

Flyer Elements

Projects (What are they?)

Three kinds

The Startup Project

This is a special project. It contains control croutons. These croutons set up certain aspects of the Flyer's and Toaster's operation. They include many functions that were previously found on the Setup screen in older versions of the Toaster software.

DV3/Background Color
Effect Color
Video Signal Termination
Remote GPI settings
Control Panel settings

Video Project (or Program)

The most common type of project that you will use.

Interactive Project

A kind of video project that involves user feedback, such as an interactive kiosk display, or a school learning tool.

Flyer Maintenance

Organizing Projects

Our recommendations on organizing the elements that go into a project (how to arrange folders, where to store items, etc.)

Archiving Projects (Backing up your work)

Overview: How it's done

Enter Files/Files display

Drag a project icon to another drive

Message asks you which items you want to copy/archive to the other location? Select those items.

Project file

Related Video Clips

Related Audio Clips

Toaster Framestores/Flyer Stills

CG Pages

Effects

Flyer copies appropriate items to other drive (if there's room). If there's not enough room, Flyer will tell you to get rid of stuff in order to make room.

Recommended Backup Methods

SCSI 2 is preferred, since it is faster; SCSI 1 is okay too

DAT (digital audio tape)

Magneto-Optical drive

Removable Media

Bernoulli

SyQuest

Others?

How fast are these forms of backup? Can we give an indication? Will a half-hour program take half an hour, or less? Need some reference points here.

Other Issues

Time Code in Video Production

What is Time Code

A system developed by the SMPTE to ensure editing accuracy. Format is...

HOURS:MINUTES:SECONDS:FRAMES.

Assigns an arbitrary number to each frame of video (arbitrary in the sense that the starting point may be any number, and all frames are numbered sequentially from that point onward)

Enables editing equipment to repeat exact edits with complete precision

Types of Time Code

Drop Frame and Non-Drop Frame

Originally, there was one form of time code: non-drop frame. However, for technical reasons, the

frame rate of the NTSC color signal was made slightly different than for black-and-white television. Using non-drop frame time code to edit color television signals results in mismatched time values. To allow for this difference and ensure accuracy when important, drop frame time code was developed.

Important issue to remember: drop frame time code only drops numbers from its counting, it does not drop frames of video. Therefore, with drop frame time code, the video is continuous while the numbering skips two frames every minute (frame numbers 00 and 01 are dropped). Every 10 minutes, two frame numbers are not dropped. This 108 frames out of every hour, for a total of 3.6 seconds, so that tape time matches clock time.

Drop Frame (Recommended)

Accurate to a real time clock. One hour on tape equals one hour of real time.

Generally used for TV programs that must run for an exact length of real clock time.

Non-drop Frame

Not accurate to a real time clock. One hour on tape equals one hour and 3.6 seconds of real time.

Generally used for commercials (which usually last for 15-30 seconds, so they do not need to bother with the dropped frame that occurs with every full minute of recorded tape time), or promotional tapes (which are typically edited for pacing and content rather than a specific length of time).

Methods of Recording Time Code

Requires a time code generator (separate device connected to VCR, or built into some equipment)

Vertical Interval Time Code (VITC, vit-see).

Must be recorded at the same time as the picture (cannot be added afterward, as LTC can).

Recorded on unseen scan lines at the top of the video image

Audio Time Code (also called Longitudinal Time Code, or LTC, lit-see).

Recorded onto an audio track. May be recorded during a shoot or afterward, on any available audio channel.

Time Code Considerations

Synchronous vs. Non-synchronous

When recording, the time code generator must be locked to a reference video signal. Otherwise, the time code and video frames might not match up. The video might be halfway between one frame and the next when the time code generator says 00:01:35:24. What the time code says is Frame 24 would then be a point halfway between two frames, causing editing problems.

Time Code with the FlyerDuring RecordingBatch Digitizing

before-the-edit (while recording clips into Flyer)

after-the-edit (using low-quality footage and going back afterward to recapture at high quality)

During Editing

Drop Frame time code is shown on all control panels.

During Playback

Does time code come out anywhere?

Other Time Code Flyer Notes

When recording, Flyer accepts LTC via its serial port only. If you use VITC, you will need a translator to convert the signal to serial LTC.

Tutorials: Lessons in Editing**Glossary****Appendices****Index****misc...****Important concept: "the selected item" and "the active window"**

When the Flyer is in any two-window display, the functions on the button bar across the center of the screen can affect the selected croutons/items in either window. First, select the item you wish to work with, then select the function.

Note: the delete button, when deleting an icon from a Project window, will not ask you to confirm this action, since it does not actually remove the item from the hard disk. This is often referred to as a non-destructive action, since nothing is lost. However, whenever you choose an item that resides on disk, followed by an action such as delete, the Flyer will ask you if you are certain that this is what you wish to do.